The Shoulder

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Back to Health Chiropractic

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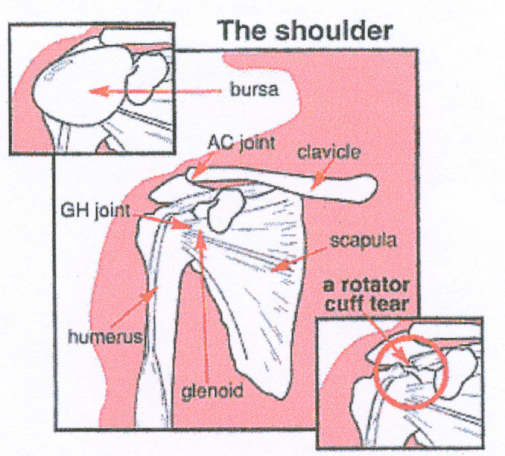
Shoulder Anatomy 101

The shoulder has three joints; the glenohumeral (GH) joint, the acromioclavicular (AC) joint, and the scapulothoracic (ST) joint. When people refer to the **shoulder joint** they are usually referring to the **glenohumeral joint**. This is where the rounded head of the humerus meets the scooped-out glenoid fossa of the scapula.

Working in conjunction with these three joints to make the shoulder fully functional are an intricate system of bones, muscles, tendons, ligaments, and bursa sacs. Together they permit the greatest flexibility and range of motion of any joint in the human body. However, in this same respect, it also makes it one of the most unstable.

To help stabilize this structure our body has developed a complex of four muscles, collectively called the **rotator cuff muscles**. In as much as they allow movement of the arm, they also provide a large amount of muscular stability. It is these muscles as well as the components aforementioned that are prone to



weakening, tears, nerve impingements and repetitive strain injuries of the shoulder.

There are several factors that contribute to shoulder disorders;

- the aging process, including disuse and atrophy
- strain and overuse
- trauma

Special points of interest:

- *Dr. Rodwin was in the Penticton Ironman on August24. She finished in a time of 12:30:50. Congratulations on a fantastic finish!*
- *Back to Health is running for The Cure on October 6th. Come join our team...see page 2 for details.*

Inside this issue:

A bit more about the "rotator cuff"...

There are 4 muscles that make up the rotator cuff complex; infraspinatus, supraspinatus, subscapularis and teres minor. They help in lateral rotation of the arm as well as in lifting the arm up. Rotator cuff injuries can be a result of progressive worsening of tendinitis, repetitive strain injuries or trauma- especially as a result of trauma.

Researchers have found that rotator cuff tears occur more often in people who rarely exercise or participate in sports only sporadically. People who keep in shape through regular exercise are more likely to maintain strong bones and rotator cuff strength, and to diminish the chance of future shoulder injury.

RUN FOR THE CURE

Canadian Breast Cancer Foundation

WE WANT YOU!!!

This year the CIBC Run for the Cure is celebrating its 11th annual run on Sunday, October 6, 2002. Last year more than 115,000 participants helped to raise over $11.2 million. In Ottawa alone almost 5,300 people generated $485,300 through their support and participation and this year we hope to do even better.

Run or walk, 1km or 5km, on your own or with a friend or two...or three! There are prizes to be won and fun to be had, all while supporting a great cause!

For more information call 738-CURE (2873)

Come join the **Back to Health Team** on **Sunday, October 6, 2002** as we run, walk, and jog together to help support cancer victims and the research that might provide a cure!

Registration is $25 per team member and we would love to have you on our team. To register please sign up at the front desk and pick up a registration form and information sheet.

If you can't join us in our run but would like to support us your donations are greatly appreciated!

Freestyle, butterfly, breast-stroke, back crawl.... swimming can be a strain!

The benefits of swimming are numerous; gaining muscular strength, stability, and improving cardiovascular endurance. Being in a non-weight bearing environment places less stress on joints however you still use your muscles to produce force and movement. And in swimming your arms and shoulders are a major component of propelling yourself forward! Therefore it goes to say that there is a good possibility for repetitive strain injury as the shoulder rotates and pulls your body pool length after pool length.

Some of the types of injuries that may occur include micro tears from overexertion or fatigue, and strains from overuse. If tendinitis already exists, activity may only serve to worsen it.

As muscle tissue becomes compromised pain and discomfort ensue. But on a more biological level, there can be both a lack of nutrition and circulation to the muscle fibres which can decrease their strength and the stability of your shoulder as a whole. Both massage therapy and A.R.T. can help reduce such effects and return the muscles and surrounding components to an increased state of functionality.

A.R.T. helps to break up muscle adhesions, returning range of motion while massage therapy increases circulation and therefore nutrient flow. Muscle spasms and trigger points can be reduced relieving discomfort and at the same time allowing the joint a better environment to heal in.

Helping to heal dislocations

There are 3 bones that comprise the shoulder joint: the scapula (your shoulder blade), the humerus (your upper arm), and the clavicle (your collar bone). Although there is a large range of motion in this joint it in turn means that it is less stable, and in sports, is prone to injury and dislocation.

Both chiropractic care and acupuncture are viable options to help restore range of motion of the joint and to ensure that the bones are healing in proper alignment.

Acupuncture can be applied right away whereas chiropractic care would be indicated after about 10 days.

Possible consequences of not being treated can include nerve impingements and "frozen shoulder" whereby the capacity of the shoulder is restricted in movement.

If you have had a shoulder injury in the past ask Dr. Rodwin or Dr. Schlachta to check your glenohumeral joint!